

ABSTRACT

A signal pair interference power ratio of the received signal at a user terminal is obtained and this ratio is then compared with the signal pair interference power ratio required for correct demodulation. Accordingly, the user terminals can be classified into those in the non-interference domain and those in the interference domain. A plurality of access points make the simultaneous communications to the user terminals in the non-interference domain and also make the communications on the time-division basis to the user terminals in the interference domain. Thereby, it is now possible to solve the problem, in the communication system in which the total throughput of the system can be improved through simultaneous transmissions from a plurality of access points with the wireless access system to connect the user terminals to the wired network via the access points, that the throughput of the user terminal which cannot demodulate correctly the desired signal if the data packets collide with each other is more deteriorated than the user terminal which can correctly demodulate the desired signal because the desired signal pair interference power ratio is large even when the data packets collide with each other.